### Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, Kentucky 40601 (502) 564-3999

### AIR QUALITY PERMIT Issued under 401 KAR 52:040

**Permittee Name:** North American Refractories Company

Mailing Address: 400 Fairway Drive

Moon Township, PA 15108

**Source Name:** North American Refractories Company

Mailing Address: US Highway 23

South Shore, KY 41175

Source Location: US Highway 23 - South Shore, KY

Permit ID: S-08-133 Agency Interest #: 1601

**Activity ID: APE20080001** 

**Review Type:** Minor Source, Operating

Source ID: 21-089-00008

**Regional Office:** Ashland Regional Office

1550 Wolohan Drive, Suite 1

Ashland, KY 41102 (606) 929-5285

**County:** Greenup

**Application** 

Complete Date: July 25, 2008

Issuance Date: December 10, 2008

**Revision Date:** N/A

**Expiration Date:** December 10, 2018

John S. Lyons, Director Division for Air Quality

Revised 05/07/07

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### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on September 12, 2008, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from Division, except as provided in this permit or in the Regulation 401 KAR 50:040, State-Origin Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals that may be required by the Cabinet or any other federal, state, or local agency.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**Jaw Crusher - Constructed 1968** 

01 EP02/ Loader (Pick-Up)

EP04-2 (Maximum Process Rate - 25 tons/hour)

Control: Enclosure

EP02/ Loader (To Crusher)

**EP04-2** (Maximum Process Rate - 22 tons/hour)

Control: Enclosure

EP02/ Loader (To Hopper)

EP04-2 (Maximum Process Rate - 3 tons/hour)

Control: Enclosure

**Bulk Unloader - Constructed 1996** 

Dense Phase

**EP03-1** Super Sacks (To Hopper)

(Maximum Process Rate – 2 tons/hour)

Control: Enclosure

**EP03-1** Hopper (To Conveyor)

(Maximum Process Rate – 3 tons/hour)

Control: Enclosure

**Bulk Unloader - Constructed 1996** 

Coarse Grain

(-) Bulk Sand Unloader (To Chute)

(Maximum Process Rate – 9 tons/hour)

Control: Enclosure

(-) Chute (To Elevator/Bins)

(Maximum Process Rate - 9 tons/hour)

Control: Enclosure

**Brick Production - Constructed 1986** 

**Power Pressing** 

EP05/ Mixers (To Hopper)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Hopper (To Conveyor)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Brick Production - Constructed 1986** 

**Power Pressing** (Continued)

01 EP05/ Conveyor (To Fluidized Bed Dryer)

EP10 (Maximum Process Rate - 3 tons/hour)

Control: Wet Material

EP05/ Fluidized Bed Dryer (To Screen)

**EP10** (Maximum Process Rate - 3 tons/hour)

Control: Wet Material

EP05/ Screen

EP10 (Maximum Process Rate - 3 tons/hour)

Control: Wet Material

EP05/ Screen (To Hopper)

EP10 (Maximum Process Rate - 3 tons/hour)

Control: Wet Material

EP05/ Hopper (To Hopper)

**EP10** (Maximum Process Rate - 3 tons/hour)

Control: Wet Material

EP05/ Mixers (To Hopper)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Hopper (To Conveyors)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Conveyor (To Power Presses)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Power Presses

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Power Presses (To Kiln Cars)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

EP05/ Kiln Cars (To Dryers)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Wet Material

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Brick Production - Constructed 1986** 

**Impact Pressing** 

01 EP06 Mixers (To Hoppers)

(Maximum Process Rate - 5.32 tons/hour)

Control: Wet Material

**EP06** Power Press Mixer (To Hopper)

(Maximum Process Rate - 1.88 tons/hour)

Control: Wet Material

**EP06** Hopper (To Impact Presses)

(Maximum Process Rate - 1.88 tons/hour)

Control: Wet Material

**EP06** Impact Presses

(Maximum Process Rate - 7.2 tons/hour)

Control: Wet Material

**EP06** Impact Presses (To Kiln Car)

(Maximum Process Rate - 7.2 tons/hour)

Control: Wet Material

**EP06** Kiln Car (To Drying Room)

(Maximum Process Rate - 7.2 tons/hour)

Control: Wet Material

**Monolithics - Constructed 1996** 

Material Handling, Mixers, Molds and Dryers

01 (-) Muns/Simpson Mixers (To Packing) (Maximum Process Rate - 2 tons/hour)

(Maximum 1 10cess Rate - 2 tons/nour

Control: Wet Material

(-) Meyers Mixers (To Packing)

(Maximum Process Rate - 2 tons/hour)

Control: Wet Material

**Monolithics - Constructed 1996** 

**Gel Casting** 

(-) Muns/Simpson/Eir Mixers (To Drum/Paddle Segma Mixers)

(Maximum Process Rate - 2.2 tons/hour)

Control: Enclosure

(-) Drum/Paddle Segma Mixers

(Maximum Process Rate - 2.2 tons/hour)

Control: Enclosure

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Monolithics - Co	nstructed 1996
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**Gel Casting** (Continued)

01 (-) Drum/Paddle Segma Mixers (To Molds) (Maximum Process Rate - 2.2 tons/hour)

Control: Wet Material

(-) Molds (To Dryer)

(Maximum Process Rate - 2.2 tons/hour)

Control: Wet Material

Vibra Casting

(-) Raw Materials (To B/D Mixers)

(Maximum Process Rate - 1 ton/hour)

Control: Enclosure

(-) Bowl/Drum Mixers

(Maximum Process Rate - 1 ton/hour)

Control: Enclosure

(-) Bowl/Drum Mixer (To Molds)

(Maximum Process Rate - 1 ton/hour)

Control: Wet Material

(-) Molds (To Dryers)

(Maximum Process Rate - 1 ton/hour)

Control: Wet Material

**Monolithics - Constructed 1996** 

Slip Casting

(-) Raw Materials (To Skip Hoist)

(Maximum Process Rate - 1 ton/hour)

Control: Enclosure

(-) Skip Hoist (To Simpson Mixers)

(Maximum Process Rate - 1 ton/hour)

Control: Enclosure

(-) Simpson Mixers

(Maximum Process Rate - 1 ton/hour)

Control: Enclosure

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01	(-)	Monolithics - Constructed 1996  Slip Casting (Continued)  Simpson Mixers (To Hoppers)  (Maximum Process Rate - 1 ton/hour)  Control: Wet Material
	(-)	Hoppers (To Kiln Car) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Hoppers (To Pressure Tank) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Hopper (To Pressure Tank) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Pressure Tank (To Molds) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Molds (To Dryers) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Raw Material (To Drum Mixers) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Drum Mixers (Maximum Process Rate - 1 ton/hour) Control: Enclosure
	(-)	Drum Mixers (To Molds) (Maximum Process Rate - 1 ton/hour) Control: Wet Material
	(-)	Molds (To Dryer)

(Maximum Process Rate - 1 ton/hour)

Control: Wet Material

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 01 (-) Unpaved Haul Road

### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 63:010, Fugitive emissions, applies to each of the affected facilities listed above.

### 1. **Operating Limitations:**

N/A

### 2. <u>Emission Limitations</u>:

- a. The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.
- b. Pursuant to Regulation 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
  - 1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
  - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
  - 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.
  - 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
  - 5) The maintenance of paved roadways in a clean condition;
  - 6) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- c. Pursuant to Regulation 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

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## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. <u>Emission Limitations</u>: (Continued)

- d. Pursuant to Regulation 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- e. Pursuant to Regulation 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:
  - 1) Pursuant to Regulation 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
  - 2) Pursuant to Regulation 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

### **Compliance Demonstration Method:**

See Section C, General Condition 6.a.

### 3. Testing Requirements:

N/A

#### 4. **Monitoring Requirements:**

See Section C, General Condition 6.a.

#### 5. Recordkeeping Requirements:

See Section C, General Conditions 2.a., 2.b., and 6.a.

#### **6.** Reporting Requirements:

See Section C, General Conditions 3.a., 3.b., 3.c. and 6.b.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Jaw Crusher Unit - Constructed 1968** 

02 EP02/ Telsmith Jaw Crusher

EP04-2 (Maximum Process Rate – 22 tons/hour)

Control: Jaw Crusher Dust Collector

(Model: Torit 770 (1980))

EP02/ Crusher/Hopper (To Conveyor)

EP04-2 (Maximum Process Rate – 25 tons/hour)

Control: Jaw Crusher Dust Collector

(Model: Torit 770 (1980))

EP02/ Conveyor (To Elevator)

EP04-2 (Maximum Process Rate – 25 tons/hour)

Control: Jaw Crusher Dust Collector

(Model: Torit 770 (1980))

EP02/ Elevator (To Conveyor)

**EP04-2** (Maximum Process Rate – 25 tons/hour)

Control: Jaw Crusher Dust Collector

(Model: Torit 770 (1980))

EP02/ Conveyor (To Conveyor)

EP04-2 (Maximum Process Rate – 25 tons/hour)

Control: Jaw Crusher Dust Collector

(Model: Torit 770 (1980))

**Grain Preparation Constructed 1969** 

**Cone Crushing Unit** 

**EP04-1** Feeder (To Conveyor)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Conveyor (To Bins)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Bins (To Feeder)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Grain Preparation Construction 1969**

**Cone Crushing Unit** (Continued)

02 EP04-1 Feeder (To Conveyor)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Conveyor (To Cone Crusher)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Rexnard Cone Crusher

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Cone Crusher (To Conveyor)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Conveyor (To Elevator)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Elevator (To Screens)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Screens

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Screens (To Conveyor/Magnet)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Grain Preparation Constructed 1969**

Cone Crushing Unit

02 EP04-1 Conveyor/Magnet (To Bins)

(Maximum Process Rate – 4 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

Dry Pan No.2 Unit

EP04-2 Conveyor (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Bins (To Feeder)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Feeder (To Dry Pan)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2 Dry Pan #2** 

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Dry Pan (To Conveyor)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Conveyor (To Elevator)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Elevator (To Screens)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Grain Preparation Constructed in 1969**

Dry Pan No.2 Unit

02 EP04-2 Screens

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Screens (To Conveyor/Magnet)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Conveyor/Magnet (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

Dry Pan No. 3

EP04-2 Conveyor (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Bins (To Feeder)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Feeder (To Conveyor)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Conveyor (To Dry Pan)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Grain Preparation Constructed 1969**

Dry Pan No. 3 Unit (Continued)

02 EP04-2 Dry Pan #3

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Dry Pan #3 (To Conveyor)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Conveyor (To Elevator)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-2** Elevator (To Screens)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Screens

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Screens (To Conveyor)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-2 Conveyor (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**Grain Preparation Constructed 1969** 

Gryro Crusher (1969)

EP04-2 Conveyor (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Grain l	Preparatio	on Constru	cted 1969
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Gyro Crusher (Continued)

#### 02 EP04-2 Bins (To Feeder)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

### **EP04-2** Feeder (To Gyro Crusher)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### EP04-2 Rexnard Gyro Disc Crusher

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### **EP04-2** Gyro Crusher (To Conveyor)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### EP04-2 Conveyor (To Elevator)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### **EP04-2** Elevator (To Screens)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### EP04-2 Screens

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

#### EP04-2 Screens (To Roll Magnet)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

### EP04-2 Conveyor (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Dry Pans/Gyro Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Grain Preparation Constructed 1969**

Ball Mill

02 EP04-1 Conveyor (To Bins)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Tote Sack (To Hopper)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Bin/Hopper (To Feeder)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Feeder (To Ball Mill)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Allis Chalmers Ball Mill

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Ball Mill (To Elevator)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

**EP04-1** Elevator (To Screens)

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

EP04-1 Screens

(Maximum Process Rate – 3 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Grain Preparation Constructed 1969** 

Ball Mill (Continued)

02 EP04-1 Screens (To Bins)

(Maximum Process Rate – 7 tons/hour)

Control: Ball Mill/Cone Crusher Dust Collector

(Model: Buell Norblo-Shaker, Dust Arrester N-510 (1968))

04 EP07 Swindell-Dressler Tunnel Kiln

Rated at 21 mmBtu/hr

(Maximum Process Rate - 4.3 tons/hour)

Control: None

### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 61:020, Existing process operations, applies to each of the affected facilities listed above constructed before July 2, 1975, which is associated with a control device or stack and not subject to another emission standard with respect to particulates.

### 1. Operating Limitations:

N/A

#### 2. Emission Limitations:

The Division for Air Quality has determined that this facility's potential to emit any air pollutant is less than 100 tons per year. Therefore, although the permit is conditioned to allow emissions in excess of 100 tons per year pursuant to federally enforceable Regulation 401 KAR 61:020, Existing process operations, emissions equal to or in excess of 100 tons per year of any pollutant are not possible. Accordingly, this permit is being issued as a minor source state-origin permit.

- a. Pursuant to Regulation 401 KAR 61:020, Section 3(2)(a):
  - 1. Emissions of particulate matter from the Telsmith Jaw Crusher [emission point 02 (EP02/EP04-2)] shall not exceed 32.524 lbs/hr.
  - 2. Emissions of particulate matter from the Hopper, Three Conveyors and Transfer Points and Elevator [emission points 02 (EP02/EP04-2)] shall not exceed 35.433 lbs/hr. each.
  - 3. Emissions of particulate matter from the Four Conveyors and Transfer Points, Bins, Feeder, Rexnard Cone Crusher, Elevator and Screens [emission points 02 (EP04-1)] shall not exceed 10.379 lbs/hr. each.
  - 4. Emissions of particulate matter from the Eleven Conveyors and Transfer Points, Three Bins, Four Feeders, Dry Pan #2, Three Elevators, Six Screens, Dry Pan #3 and Rexnard Gyro Disc Crusher [emission points 02 (EP04-2)] shall not exceed 15.101 lbs/hr. each.

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## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Emission Limitations:** (Continued)

- 5. Emissions of particulate matter from the Conveyor and Transfer Points, Tote Sack, Bin/Hopper, Feeder, Allis Chalmers Ball Mill, Elevator and Screens [emission points 02 (EP04-1)] shall not exceed 8.560 lbs/hr. each.
- b. Pursuant to Regulation 401 KAR 61:020, Section 3(1), the opacity of visible emissions from each affected facility shall not equal or exceed forty percent (40%).

#### **Compliance Demonstration Method:**

a. Compliance with the applicable hourly particulate emission limit for each affected facility follows:

Hourly Particulate Emission Rate =

(Monthly Processing Rate) (Emission Factor from AP-42 or Stack Testing\*)
------ X (1- Control Efficiency)
Hours of operation per month

- \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.
- b. In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9, as directed by 401 KAR 61:020, Section 4.
- c. See Section C, General Condition 6.a.

#### 3. Testing Requirements:

N/A

#### 4. Monitoring Requirements:

- a) The permittee shall monitor the monthly hours of operation and the total monthly input of raw materials of each processes unit at each emission point.
- b) For each stack, vent or control system:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment malfunction.

If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **APPLICABLE REGULATIONS:** (Continued)

### 4. <u>Monitoring Requirements</u>: (Continued)

See Section C, General Condition 6.a.

### 5. <u>Recordkeeping Requirements</u>:

a) The permittee shall maintain on site a daily log of the pressure drop across the baghouses and ensure all parameters remain within the range recommended by the manufacturer and/or standard operating practices.

See Section C, General Conditions 2.a., 2.b., and 6.a.

### **Reporting Requirements:**

See Section C, General Conditions 3.a., 3.b., 3.c., and 6.b.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Bulk Unloader - Constructed 1996**

Dense Phase System

03 EP03-1 Railcar (To Hopper)

(Maximum Process Rate – 1 tons/hour)

Control: Dense Phase Dust Collector (Model: Flex Kleen 84CT38 (1983))

EP03-1 Conveyor (To Bins)

(Maximum Process Rate - 3 tons/hour)

Control: Dense Phase Dust Collector (Model: Flex Kleen 84CT38 (1983))

**Bulk Unloader Constructed 1996** 

**Coarse Grain System** 

EP03-2 Super Sack (To Hopper)

(Maximum Process Rate - 3 tons/hour)

Control: Coarse Grain Dust Collector

(Model: Buell Norblo-Shaker Dust Arrester N-510 (1968))

**EP03-2** Hopper (To Conveyor)

(Maximum Process Rate - 3 tons/hour)

Control: Coarse Grain Dust Collector

(Model: Buell Norblo-Shaker Dust Arrester N-510 (1968))

EP03-2 Conveyor (To Elevator)

(Maximum Process Rate - 3 tons/hour)

Control: Coarse Grain Dust Collector

(Model: Buell Norblo-Shaker Dust Arrester N-510 (1968))

EP03-2 Elevator (To Bins)

(Maximum Process Rate - 3 tons/hour)

Control: Coarse Grain Dust Collector

(Model: Buell Norblo-Shaker Dust Arrester N-510 (1968))

**Brick Production - Constructed 1986** 

**Power Presses Operation** 

EP05/ Bins (To Batch Cars)

EP10 (Maximum Process Rate - 33 tons/hour)

Control: Power Press Mixer Dust Collector

(Model: Norblo (1986))

EP05/ Batch Cars (To Mixers)

EP10 (Maximum Process Rate - 33 tons/hour)

Control: Power Press Mixer Dust Collector

(Model: Norblo (1986))

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Brick Production - Constructed 1986** 

Power Presses Operation (Continued)

03 EP05/ Raw Material (To Mixers)

EP10 (Maximum Process Rate - 15 tons/hour)

Control: Power Press Mixer Dust Collector

(Model: Norblo (1986))

EP05/ 5 Eirich Mixers (1 Richards)

EP10 (Maximum Process Rate - 43 tons/hour)

Control: Power Press Mixer Dust Collector

(Model: Norblo (1986))

**Brick Production - Constructed 1986** 

**Impact Presses Operation** 

**EP06** Bins (To Batch Cars)

(Maximum Process Rate - 4.32 tons/hour)

Control: Impact Press Mixer Dust Collector (Model: Farr Tenkay 116709-001 (1987))

**EP06** Batch Cars (To Mixers)

(Maximum Process Rate - 4.32 tons/hour)

Control: Impact Press Mixer Dust Collector (Model: Farr Tenkay 116709-001 (1987))

**EP06** Raw Materials (To Mixers)

(Maximum Process Rate - 1 tons/hour)

Control: Impact Press Mixer Dust Collector (Model: Farr Tenkay 116709-001 (1987))

EP06 4 Simpson Impact Press Mixers

(Maximum Process Rate - 5.32 tons/hour)

Control: Impact Press Mixer Dust Collector (Model: Farr Tenkay 116709-001 (1987))

**Monolithics - Constructed 1996** 

Material Handling, Mixers, Molds and Dryers

(-) Bins (To Batch Cars)

(Maximum Process Rate - 4 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Batch Cars (To Hopper)

(Maximum Process Rate - 4 tons/hour)

Control: Two Small Cartridge Dust Collectors

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Monolithics - Constructed 1996** 

Material Handling, Mixers, Molds and Dryers (Continued)

03 (-) Hopper (To Muns/Simpson Mixers)

(Maximum Process Rate - 4 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Raw Material (To Skip Hoist)

(Maximum Process Rate - 2 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Skip Hoist (To Muns/Simpson Mixers)

(Maximum Process Rate - 2 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Muns/Simpson Mixers

(Maximum Process Rate - 10 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Raw Material (To Meyers Mixers)

(Maximum Process Rate - 2 tons/hour)

Control: Two Small Cartridge Dust Collectors

(-) Meyers Mixers

(Maximum Process Rate - 2 tons/hour)

Control: Two Small Cartridge Dust Collectors

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010, New process operations, applies to each of the affected facilities listed above.

#### 1. Operating Limitations:

N/A

### 2. <u>Emission Limitations</u>:

The Division for Air Quality has determined that this facility's potential to emit any air pollutant is less than 100 tons per year. Therefore, although the permit is conditioned to allow emissions in excess of 100 tons per year pursuant to federally enforceable Regulation 401 KAR 59:010, New process operations, emissions equal to or in excess of 100 tons per year of any pollutant are not possible. Accordingly, this permit is being issued as a minor source state-origin permit.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **APPLICABLE REGULATIONS**: (Continued)

#### 2. Emission Limitations: (Continued)

- a. Pursuant to State Regulation 401 KAR 59:010, Section 3(2) and Appendix A:
  - 1) Emissions of particulate matter from the Railcar and Raw Material [emission points 03(EP03-1) and 03 (EP06)] shall not exceed 3.59 lbs/hr each.
  - 2) Emissions of particulate matter from the Super Sack, Hopper, Conveyor and Elevator [emission points 03 (EP03-2)] shall not exceed 7.094 lbs/hr each.
  - 3) Emissions of particulate matter from the Bins and Batch Cars [emission points 03(EP05/EP10)] shall not exceed 31.374 lbs/hr each.
  - 4) Emissions of particulate matter from Raw Material [emission points 03 (EP05/EP10)] shall not exceed 19.234 lbs/hr.
  - 5) Emissions of particulate matter from the Five Eirich Mixers [emission points 03 (EP05/EP10)] shall not exceed 36.97 lbs/hr each.
  - 6) Emissions of particulate matter from the Bins and Batch Cars [emission points 03 (EP06)] shall not exceed 8.894 lbs/hr each.
  - 7) Emissions of particulate matter from the Four Impact Press Mixers [emission points 03 (EP06)] shall not exceed 10.12 lbs/hr each.
  - 8) Emissions of particulate matter from the Bins, Batch Cars and Hopper [emission points 03 (-)] shall not exceed 8.48 lbs/hr. each.
  - 9) Emissions of particulate matter from the Skip Hoist, Muns/Simpson/Meyers Mixers and Raw Material [emission points 03 (-)] shall not exceed 5.517 lbs/hr each.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Applicable Regulations: (Continued)** 

### 2. Emission Limitations: (Continued)

a. (Continued)

As determined by the following equations using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 3.59 P^{0.62}$ 

For process rates in excess of 60,000 lbs/hr  $E = 17.31 P^{0.16}$ 

For the equation E= rate of emission in lb/hr and P= process weight rate in tons/hour

b. Pursuant to State Regulation 401 KAR 59:010, Section 3, any continuous emissions into the open air shall not equal or exceed twenty percent (20%) opacity.

### **Compliance Demonstration Method:**

a. Compliance with hourly emission limit shall be determined as follows:

Hourly Emission Rate = [Monthly processing rate x Emission Factor as determined from AP-42 or Stack Testing\* / (Hours of operation per month)] x (1 - control efficiency)

- \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.
- b. In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9.
- c. See Section C, General Condition 6.a.

#### 3. Testing Requirements:

N/A.

#### 4. **Monitoring Requirements:**

- a) The permittee shall monitor the monthly hours of operation and the total monthly input of raw materials of each processes unit at each emission point.
- b) For each stack, vent or control system:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment malfunction.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. Monitoring Requirements: (Continued)

ii. (Continued)

If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

See Section C, General Condition 6.a.

### 5. Recordkeeping Requirements:

a) The permittee shall maintain on site a daily log of the pressure drop across the baghouses and ensure all parameters remain within the range recommended by the manufacturer and/or standard operating practices.

See Section C, General Conditions 2.a., 2.b., and 6.a.

### **Reporting Requirements:**

See Section C, General Conditions 3.a., 3.b., 3.c., and 6.b.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 04 (EP07) Tunnel Kiln

### **Description:**

Natural gas burning tunnel kiln Rated at 21 mm BTU/hour Constructed: January 1968

Maximum Processing Rate: 4.3 tons/hour

### **APPLICABLE REGULATIONS:**

State Regulation 401 KAR 61:020, Existing process operations, which applies to emission units constructed before July 2, 1975.

State Regulation 401 KAR 53:010, Ambient air quality standards

### 1. Operating Limitations:

N/A

#### 2. Emission Limitations:

- a. Pursuant to State Regulation 401 KAR 61:020, Section 3(2) and Appendix A:
  - 1. Emissions of particulate matter from the Swindell-Dressler Tunnel Kiln [emission point 04 (EP07)] shall not exceed 10.895 lbs/hr.

As determined by the following equation using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 4.10 P^{0.67}$ 

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

- b. Pursuant to Regulation 401 KAR 61:020, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than forty (40) percent opacity.
- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality secondary standards, emission concentrations of gaseous fluoride (HF) modeled beyond the property boundary shall not exceed the following averages more than once per year:

1) Maximum One-Week Average: 1.64 ug/m<sup>3</sup>

2) Maximum Twenty-Four-Hour Average: 2.86 ug/m<sup>3</sup>

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Compliance Demonstration Method:

a. Compliance with hourly emission limit shall be determined as follows:

Hourly Emission Rate = [Monthly processing rate x Emission Factor as determined from AP-42 \* / (Hours of operation per month)]  $\times$  (1 – control efficiency)

- \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.
- b. In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9, as listed in Recordkeeping Requirements below.

### 3. <u>Testing Requirements:</u>

Pursuant to Regulations 401 KAR 50:055, General compliance requirements, 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using USEPA Method 5 or 17 (particulate matter) and Method 13B, 26, or 26A (hydrogen fluoride) shall be used as the stack test methods and shall be conducted as required by the Division.

#### 4. **Monitoring Requirements:**

The permittee shall monitor and maintain records of the following parameters for the kiln:

- 1) The monthly amount of products processed by each kiln / dryer,
- 2) The monthly hours of operation (hours operated / month) of the kiln.

### 5. Recordkeeping Requirements:

See Section C, General Conditions 2.a., 2.b., and 6.a.

#### 6. Reporting Requirements:

See Section C, General Conditions 3.a., 3.b., 3.c., and 6.b.

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#### **SECTION C - GENERAL CONDITIONS**

### 1. Administrative Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- c. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Section 1a-4, 5, of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- e. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
- g. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
- h. All previously issued permits to this source at this location are hereby null and void.

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### **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### 2. Recordkeeping Requirements

a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f) and Section 1b-IV-2 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

### 3. Reporting Requirements

- a. (1) In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
  - (2) The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition a.(1) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Section 1b-V-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

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### **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### 3. Reporting Requirements (Continued)

c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

### 4. <u>Inspections</u>

In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
- b. To access and copy any records required by the permit.
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

### 5. Emergencies/Enforcement Provisions

- a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

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### **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### 5. <u>Emergencies/Enforcement Provisions</u> (Continued)

(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

- c. Emergency provisions listed in General Condition 5.b are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

### 6. Compliance

- a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
  - (1) Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
  - (2) All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and nonroutine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be either normal or abnormal. If the operations, controls and/or emissions appear to be abnormal, the permittee must then comply with the requirements of Section C General Conditions, 3.a.(2), of this permit.
  - (3) A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].
- b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - (1) Identification of the term or condition;
  - (2) Compliance status of each term or condition of the permit;
  - (3) Whether compliance was continuous or intermittent;

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### **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **6.** Compliance (Continued)

(4) The method used for determining the compliance status for the source, currently and over the reporting period, and

- (5) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- (6) The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Ashland Regional Office 1550 Wolohan Drive, Suite 1 Ashland, KY 41102 Division for Air Quality Central Files 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, KY 40601

- c. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
  - (1) Applicable requirements that are included and specifically identified in this permit; or
  - (2) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

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### SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u> <u>Generally Applicable Regulation</u>

1. Fluid Bed Dryer KAR 60:730

(Maximum Rated Capacity: 3 tons/hour)

Rated at 2 mm BTU/hour

Model: Fisher-Klosterman XQ465-24

Constructed: 1998

2. **Brick Production Dryer** KAR 60:730

(Maximum Rated Capacity: 43 tons/hour)

Rated at 0.8 mm BTU/hour

Constructed: 1986

3. **Impact Presses Dryer** KAR 60:730

(Maximum Rated Capacity: 0.35 tons/hour)

Rated at .08 mm BTU/hour

Constructed: 1986

4. Impact Presses Dryer KAR 60:730

(Maximum Rated Capacity: 7.2 tons/hour)

Rated at 1.2 mm BTU/hour

Constructed: 1986

5. **Monolithics Dryer** KAR 60:730

(Maximum Rated Capacity: 2.0 tons/hour)

Rated at 5.0mm BTU/hour

Constructed: 1996

6. **Shuttle Kiln #1** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: 1.0 tons/hour)

Rated at 8.9mm BTU/hour

Model: Harrop Constructed: 1976

7. **Shuttle Kiln #2** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: .035 tons/hour)

Rated at 8.9mm BTU/hour

Model: Harrop Constructed: 1976 Permit Number: <u>S-08-133</u> Page: <u>33</u> of <u>33</u>

### **SECTION D - INSIGNIFICANT ACTIVITIES (Continued)**

8. **Bell Kiln #1** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: 1.0 tons/hour)

Rated at 5.76mm BTU/hour Model: Swindell-Dressler

Constructed: 1991

9. **Bell Kiln #2** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: 1.0 tons/hour)

Rated at 6.0mm BTU/hour

Model: Bickley Constructed: 1992

10. **Bell Kiln #3** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: 1.0 tons/hour)

Rated at 5.76mm BTU/hour

Model: Bickley Constructed: 1993

11. **Bell Kiln #4** KAR 59:010, KAR 53:010

(Maximum Rated Capacity: 0.025 tons/hour)

Rated at 5.0 mm BTU/hour

Constructed: 1995